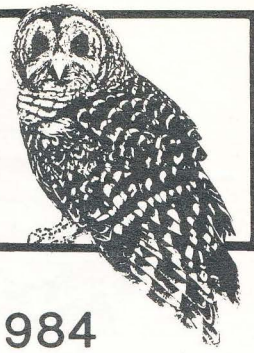




Nongame News



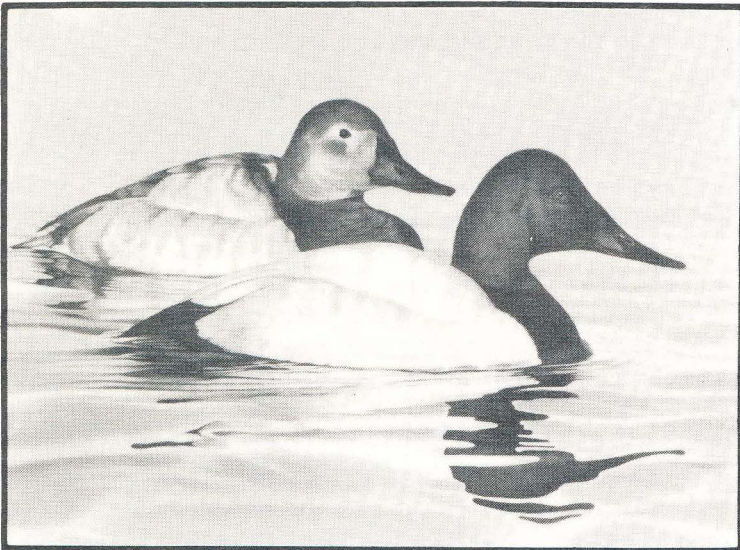
NEW JERSEY'S FIRST WATERFOWL STAMP

Collectors, waterfowl hunters and conservationists all now have an opportunity to help preserve New Jersey's rapidly disappearing wetlands and waterfowl habitat.

New Jersey has joined 28 other states in establishing a waterfowl stamp as a means of financing the acquisition, protection, maintenance and improvement of waterfowl habitat.

The state expects to raise some \$600,000 during the first year of this program, with most of the money realized from royalties received from the sale of prints of the stamp. Annual sales of the stamps are expected to generate \$100,000 annually with a majority of the money earmarked for wetland acquisition.

"What this will enable us to do," said Russell A. Cook-ingham, Director of the New Jersey Division of Fish, Game and Wildlife, "is to help save our remaining wetlands for not only waterfowl, but also for many species of fish, birds and other wildlife forms, including those of commercial value as well as those which are endangered."



Actually, New Jersey is issuing two stamps—one with a face value of \$2.50 for resident hunters, and one with a face value of \$5.00 for non-resident hunters. (Collectors will be able to purchase the \$2.50 stamp after the stamp expiration date of June 30, 1985).

Continued on page 3

Fall 1984



BALD EAGLES' NEST SECURED

The home of New Jersey's only nesting pair of bald eagles is now a secure habitat not only for the eagles but for many other forms of wildlife.

Protection for the eagles came with the acquisition by the New Jersey Division of Fish, Game and Wildlife of the 1,500-acre East Bear Swamp in Cumberland County.

The state received the right to proceed to condemn the environmentally sensitive tract on the basis of a recent ruling by Superior Court Assignment Judge Samuel G. DeSimone of Gloucester County.

Judge DeSimone ruled that New Jersey had shown sufficient proof to allow condemnation of East Bear Swamp. The property was owned by the Whitehead Brothers and the Dilks Estate and it has been leased to the Unimin Corporation, a local sand mining operation.

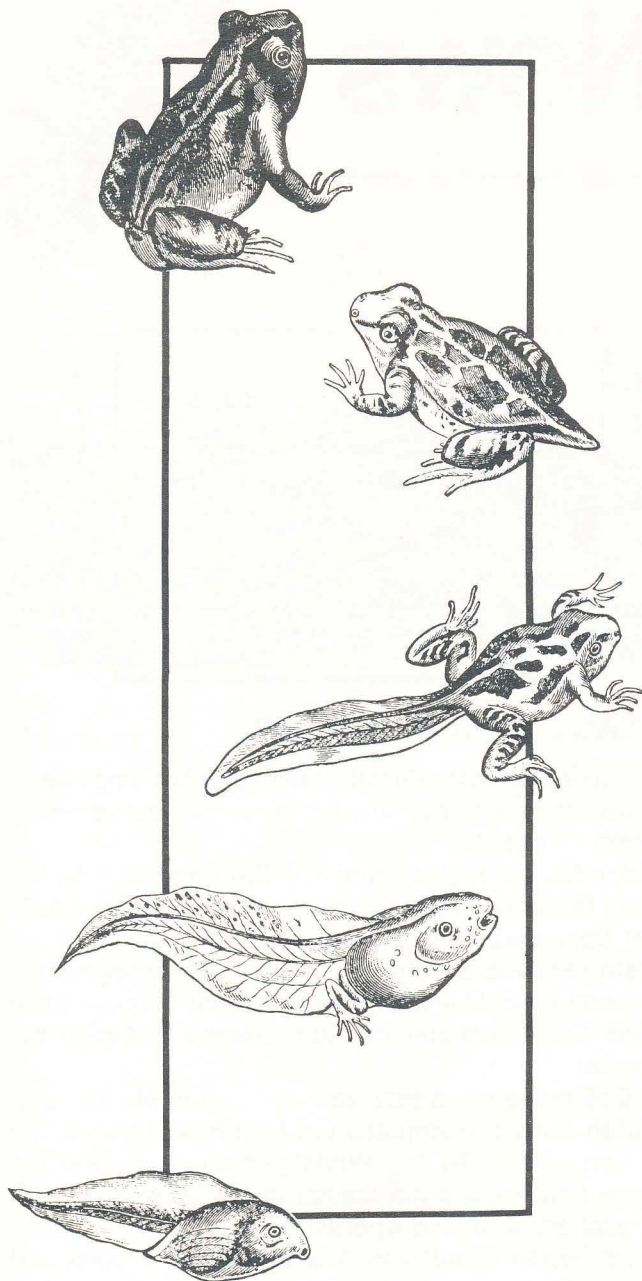
The state began acquisition proceedings to protect and preserve East Bear Swamp because of its unique and critical habitat which supports not only the eagles, but many other wildlife and flora species including the red-headed woodpecker and Northern pine snake. This area is one of the few remaining natural low-land swamps in southern New Jersey.

The acquisition of East Bear Swamp was one of the first priorities of Commissioner Robert E. Hughey of the New Jersey Department of Environmental Protection after he took office in 1982.

Working through the office of Donald T. Graham, Assistant DEP Commissioner for Regulatory and Governmental Affairs, Mr. Hughey personally directed the efforts towards a land acquisition program with the owners.

Continued on page 12

Endangered and Nongame Species Program



PRELIMINARY RESULTS ARE IN ON PINE BARREN TREEFROG STUDY

This summer, a State sponsored study discovered that the endangered Pine Barrens Treefrog, a bright green, 1½" long amphibian, can travel 332 feet in a single 24 hour period—a distance of more than 2500 times its body length! Overall movements by 5 male frogs included reaching a distance of 345 feet from their breeding pond. The potential for long distance travels on an annual basis is much greater than predicted by herpetologists, who previously suggested that the frog's size and behavior were likely to restrict its daily movements to about 25 feet. Current statutes in New Jersey protect a 300 foot buffer around each confirmed Pine Barrens Treefrog breeding pond.

In studies conducted by Rutgers University and subcontractors in a research agreement with the Department of Environmental Protection and its Endangered and Nongame Species Program, three months of data on treefrog movements were collected by following treefrogs tagged with small amounts of low level radioactive material. In another part of the study, researchers collected detailed information about the aquatic chemistry and ecology of the acidic pinelands ponds where the treefrog breeds. It will be several weeks before analysis of the samples and predator/prey relationships are complete, but initial reports indicate that Pine Barrens Treefrogs are adapted to using breeding ponds which are so acidic that most other amphibians cannot tolerate them. Final reports of ion concentrations, trace mineral contents, coexistent vegetation and invertebrates will provide an exact description of Pine Barrens Treefrog breeding site requirements.

Follow-up studies may branch out to determine if the frogs continue to move during the Fall months and to study the travels of the female. Knowledge of the endangered treefrog's habitat requirements will assist the Department of Environmental Protection in protecting their critical habitats.

*

FIRST CALL FOR GRANT MONIES

As reported in the Winter '84 issue of the NONGAME NEWS, the Endangered and Nongame Species Program is making matching grants available in amounts up to \$1000 for selected projects which will benefit the state's wildlife. Projects to be funded can include habitat improvement and development, wildlife education and research. Projects can be funded which fall into one or more of these categories. Any formally organized conservation group or club, environmental commission, citizen's group, or school board can qualify. Applications must be postmarked by November 15 to be eligible. Funding will be available in the spring of 1985.

For more information and an application, please contact Michael Valent (201-735-5450) or write Check-off Grants, CN 400, Trenton, N.J. 08625.

Nongame News

Published quarterly by the Endangered and Nongame Species Program of the Division of Fish, Game and Wildlife within the Department of Environmental Protection. Send address changes or additions to CN 400, Trenton, New Jersey 08625. Articles published in the Nongame News may be reprinted; author credit appreciated.

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NEW JERSEY'S FIRST WATERFOWL STAMP

Continued from page 1

The first-year stamp design selected was created by Tom Hirata, a wildlife artist from Rutherford, New Jersey. It depicts a pair of canvasback ducks resting on the water.

Mr. Hirata has been featured as cover artist for *Wildlife Art News* and is listed in Chapman's *Who's Who in Waterfowl Art*. His awards include two gold and two silver medals from the New Jersey Art Directors Club. He was awarded first place and best in show at the 1981 Somerset Carving and Wildlife Show, and he took best of show at the 1982 Ducks Unlimited National Wildlife Show. Also in 1982 he received an Award of Merit at the Virginia Beach Wildlife Festival.

Mr. Hirata's "First-of-State" design for New Jersey was selected from a beautiful assortment of waterfowl designs submitted by several publishers who submitted bids for producing and marketing the stamp. The publisher who received the contract is MIDWEST Marketing of Sullivan, Illinois.

In conjunction with the issuance of the stamp, artist-signed, numbered limited edition "First-of-State" prints will be available for \$135.00 each, plus the cost of the stamps which are mounted with the print. Image size of the prints is 6½ inches by 9 inches. Mounted size is 12½ inches by 14 inches.

These prints may be purchased from local wildlife art dealers. A list of dealers in your area can be obtained by writing to MIDWEST Marketing, Sullivan, Illinois 61951, or by calling toll free (800) 382-5723.

Print orders will be taken until September 30th, 1984, for the offering price of \$135.00 for the regular print, \$300.00 medallion print edition, \$550.00 executive edition, \$750.00 artist proof edition. After that, the only prints available will be from the secondary market and the price will reflect the collectible value of the print.

Most of the state and federal waterfowl prints and stamps have become valuable possessions, with some of the issues having substantially increased in value. For example, the 1983 Pennsylvania print was issued at a cost of \$140.50 and within a year was selling for \$305.00.

The help maintain value for collectors, all unsold stamps will be destroyed six months after the expiration date.

The New Jersey Waterfowl Stamp Act was signed by Governor Thomas H. Kean on January 17, 1984, and it became effective July 1, 1984.

The law requires anyone over the age of 16 to purchase a stamp prior to hunting waterfowl. Until the June 30, 1985 expiration date, the \$2.50 stamp for residents will be sold only to persons possessing a valid New Jersey hunting license. After the expiration date, this stamp will be on sale for six months to anyone wishing to buy one. The \$5.00 stamp will be on sale to non-residents and collectors at any time up until six months after the expiration date, at which time all unsold stamps will be destroyed.

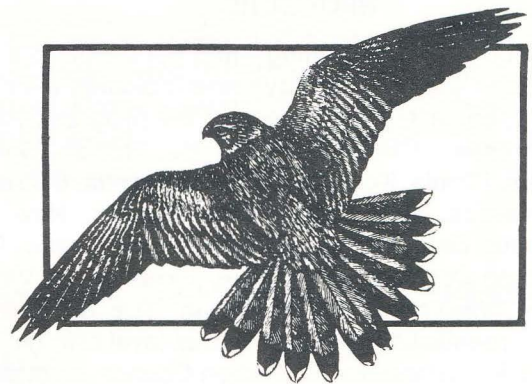
The stamps may be bought from license agents of the New Jersey Division of Fish, Game and Wildlife or may be purchased from the Division by either coming to Division headquarters, 363 Pennington Avenue, Trenton, New Jersey, or by mail.

To purchase by mail, residents must send a check or money order for \$2.50 PLUS a copy of their valid hunting license and a stamped, self-addressed envelope to: Waterfowl Stamp, New Jersey Division of Fish, Game and Wildlife, CN 400, Trenton, New Jersey 08625. Non-residents can obtain the \$5.00 stamp by sending a check or money order to the above address, along with the stamped, self-addressed envelope. Non-resident need not send a copy of their hunting license.

All funds from this sale of the stamps and from royalties on the print sales will go to a separate dedicated account for the purchase and improvement of wetlands.

Overseeing the program is a nine-member Waterfowl Advisory Committee, which recommends each year's stamp design. This committee also has the responsibility for recommending habitat conservation and acquisition projects to be funded by stamp and print revenues.

The committee consists of two members from the New Jersey Fish and Game Council; one public member appointed by the Commissioner of the Department of Environmental Protection; and one representative from each of the following organizations: The Natural Areas Council; Ducks Unlimited, Inc.; New Jersey Waterfowlers Association; The Nature Conservancy; The New Jersey Audubon Society and the New Jersey Federation of Sportsmen's Clubs.



ENDANGERED SPECIES SLIDE SHOW— ALL NEW EDITION

The slide program for teachers—"You don't know what you've got 'til it's gone" has been updated and is ready for use by New Jersey teachers. The slide program is geared for use in elementary and middle school grades and can be incorporated into science, language arts and New Jersey studies. The program illustrates the causes of decline and the measures taken to prevent the extinction of the state's endangered species.

Teachers can reserve the slide show for use with their classes by calling the Endangered Species office at 609-292-9400 or writing Division of Fish, Game and Wildlife, CN 400, Trenton, N.J. 08625.

PROJECT WILD NEWS

AWARDS

Project WILD received the 1984 Conservation Education Award from The Wildlife Society. One of the Project's principal cosponsors, the Western Regional Environmental Education Council, also received the National Wildlife Federation's 1983 Conservation Education Award—an award only given when a worthy recipient is identified—largely because of its work with Project WILD.

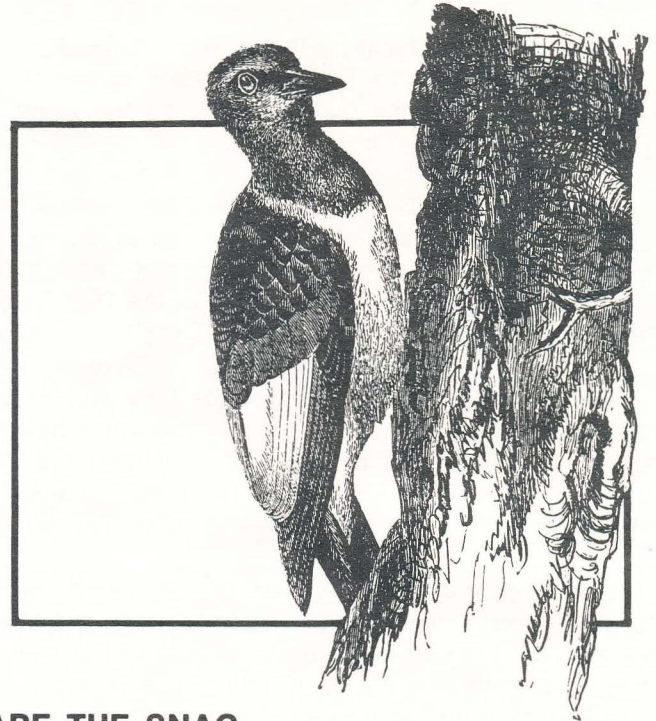
In addition to receiving awards, Project WILD recently bestowed two awards. One for Excellence in Leadership was awarded to Mr. Rudy Schafer, Program Manager for Environmental and Energy Education for the California Department of Education, one of the founders of the Western Regional Environmental Education Council, former Chairman of the Project WILD Steering Committee, and one of the most imaginative and persistent of dedicated professionals. One for Excellence in Teaching was awarded to Mr. Bob Hernbrode, Director of the Oracle Education Project, member of the Project WILD Steering Committee, also one of the founders of the Western Regional Council, and one of the most inspiring and genuine teachers we know.

SPONSORS

Project WILD is just beginning—and yet it's off to a great start. Thirty-one states so far have now indicated their commitment to sponsor the availability of the program: Alaska, Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Idaho, Illinois, Kentucky, Massachusetts, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio (pending), Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin, and Wyoming. The two principal sponsoring organizations at the national level are the Western Regional Environmental Education Council, an organization of state departments of education and resource management agencies; and the Western Association of Fish and Wildlife Agencies. Additional sponsors at the national level at present include the American Humane Association, Defenders of Wildlife, National Wildlife Federation, and The Wildlife Society. The Canadian Wildlife Federation sponsors the availability of Project WILD for all Canadian provinces, in cooperation with provincial education and wildlife agencies.

New Jersey teachers can attend Project WILD workshops in the Garden State this fall. Contact the N.J. Coordinator for more information the scheduling of WILD workshops and details of the Project WILD program by writing: Project WILD, Pequest Trout Hatchery and Natural Resource Ed. Cntr., RD 1, Box 389, Oxford, NJ 07863.

HABITRENDS, an occasional newsletter of Project WILD in North America.



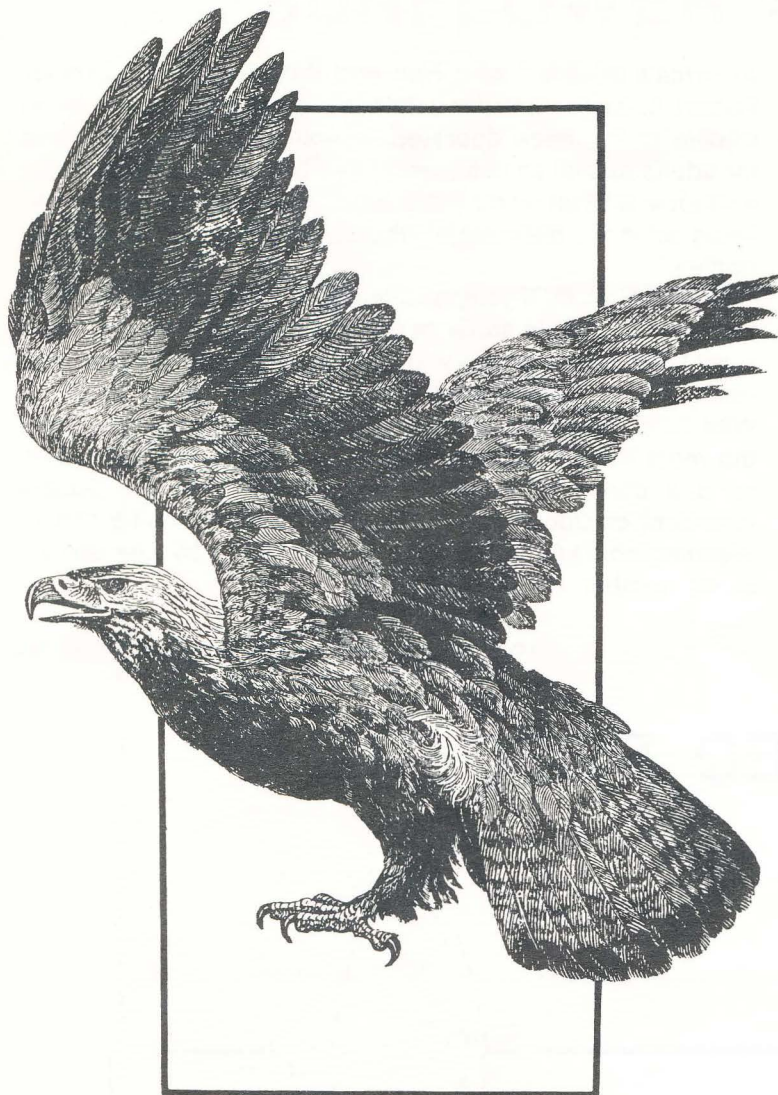
SPARE THE SNAG

Wildlife officials are asking homeowners who rely on woodburning as a primary or secondary heating source for the home to consider wildlife needs when cutting firewood. Dead trees provide den and nest sites for a multitude of wildlife species including raccoons, flying squirrels, six different species of woodpeckers and many other small mammals and birds that inhabit the woodlands of New Jersey. Unfortunately, the dead trees are usually the first to go when woodcutters take to the forests for firewood.

The recent increase in the use of the woodburning stoves as a means to lower home heating bills has caused an increase in the amount of woodcutting that occurs. The result has been the loss of a large percentage of the natural cavities that many wildlife species require for nesting, food and cover. Natural cavities have become so scarce in some areas that the populations of several species have declined to dangerously low levels.

The Barred owl and the Red-headed woodpecker are two cavity nesting species that occur in New Jersey that have been classified as threatened breeding species by the Division. The decline in populations of both species is attributed in part to the decline in the number of snags (dead or dying trees) available for the birds to use as nest trees.

Woodcutting residents can play an important role in preserving enough dead and dying trees to insure that wildlife that depends on them will have enough to survive. Before cutting trees down on a woodlot, survey the lot in an effort to determine where the best wildlife snag trees occur. Look for trees that have evidence of current occupation or previous use such as holes or claw scratch marks on the trunk. Instead of cutting down all of the snags, try to leave a few of the largest or most heavily used. That dead tree in the woodlot that you have had your eye on and planned to burn in the fireplace this winter may serve a much more valuable function if it were left standing in the woodlot.



THE EAGLES FLY

Endangered Species Program biologists have good reason to be optimistic about the future of the bald eagle in New Jersey. The hacking of eagles this summer resulted in all ten eaglets staying in the area of the hack tower long after their release. Most raptor biologists agree that if eagles remain in an area, they are more likely to imprint, and thus return to breed when they become mature.

Larry Niles, Program biologist who heads up the eagle project, attributes the eagle's preference for the area to good biological data and interpretation. The release of the eagles from their hack tower "nest" was timed precisely to the hardening of their flight feathers. The eaglets were fitted with radio-transmitters able to send a signal 10 miles.

The first eaglets left the tower on August 13. Three additional birds were released one week later. The last five were released on August 21st. The tower is about 40 feet off the ground and the nearest trees are several hundred feet away. Niles said, "Some of the birds flew off the tower at the first light of day, others took longer. Several of the birds didn't fly until the following day". The birds were watched closely throughout the first six days in order to assure their safety.

Improvements made in the vicinity of the hack tower contributed to the eagles remaining in the area. Perch poles were located in the area and clear paths were cut through nearby hedgerows to allow the newly-flying eagles easy access. In addition, fresh fish was put out on platforms. Access to the tower was restricted to all but workers at the tower site.

The ten eagles released this year bring the total to 16 eagles released through hacking. The hacking project is part of a larger Division program to protect eagle habitat and restore the eagle to its past prominence as a breeding bird in the state.

SEVEN CITED FOR EAGLE SHOOTINGS IN PENNSYLVANIA

Harrisburg, PA—Pennsylvania Game Commission and U.S. Fish and Wildlife Service officials announced this past summer the arrest and successful prosecution of seven persons involved in killing and wounding bald eagles in Pennsylvania and Canada.

According to Commission Executive Director Peter S. Duncan, the arrests culminate lengthy special investigations by both agencies—including one investigation that began back in 1974. Duncan said several prosecutions resulted from information generated through the new Pennsylvania Eagle Protection and Reward Fund. The fund was created last year to help curb increasing eagle shooting incidents in the Commonwealth.

In addition to the Game Commission, other organizations contributing to the fund include: The Pennsylvania and National Wildlife Federations, Pennsylvania Federation of Sportsmen's Clubs, National Audubon Society, Hawk Moun-

tain Sanctuary, and the Pennsylvania Forestry Association.

The fund provides up to \$1500 to any individual who offers substantive information leading to the arrest and conviction of persons harrassing, injuring or killing an eagle in Pennsylvania.

Jerry Kirkpatrick, Director of the Commission's Bureau of Law Enforcement, and Leo Badger, Senior Resident Agent of the U.S. Fish and Wildlife Service, in a joint statement, praised officers of both agencies for their skill, cooperation and perseverance in successfully culminating the investigations.

Violators were fined from \$800 to \$5000. Three of the violators were sentenced to a year of federal probation and ordered to perform community service under the supervision of federal probation officers.

from Pennsylvania Game Commission News

BUILD A BIRD FEEDER FOR ABOUT A BUCK

Americans spend over \$54 million each year on backyard birdfeeding stations and more than \$500 million on bird seed. Now the Fish and Wildlife Service has a way for you to build your own winter feeding station for next to nothing.

In fact, the Interior Department agency's two new novel birdfeeding designs can help make a big dent in your load of trash, as well as supply you with quick and easy crafts ideas for schoolchildren. Where the price of many commercial bird feeders often start at \$10, these two designs can be built for about a dollar, depending upon the household materials and simple tools you might already have at hand. Both feeders can be built in about an hour.

The first, a sunflower feeder, will draw chickadees, nuthatches, cardinals, and other winter residents, according to Fish and Wildlife biologists Alex Knight and Willard M. Spaulding, Jr., who created the designs. The other, a smaller, thistle seed feeder, is popular with goldfinches, wild canaries, pine siskins, and redpolls.

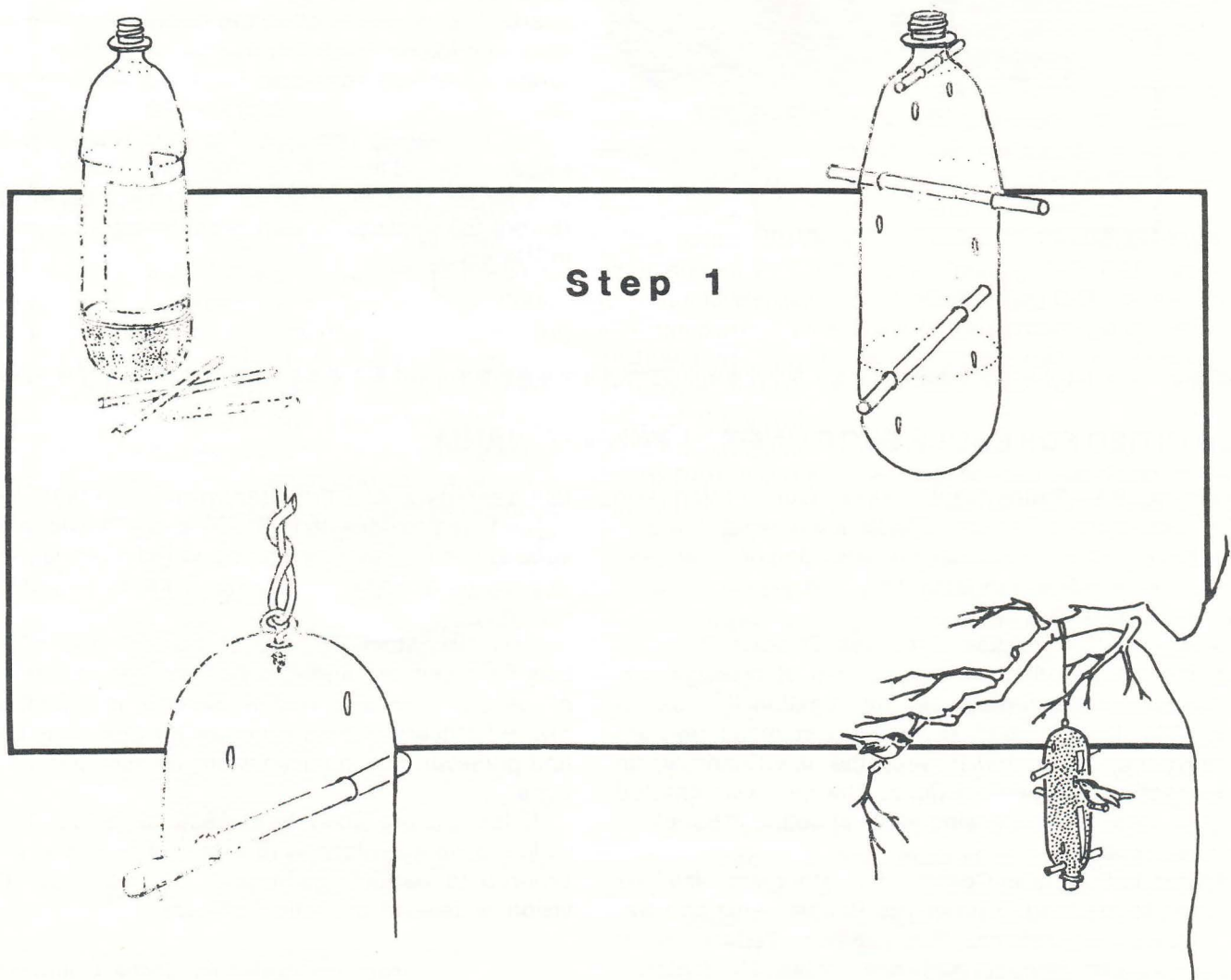
"A person doesn't have to be rich to enjoy the wealth of

America's wildlife," says Fish and Wildlife Service Director Robert A. Jantzen. "With a little ingenuity, anyone can bring wildlife to the back doorstep, opening a whole new world for adults as well as children. These two birdfeeders provide a window on that world that's quick and inexpensive. It even helps solve the dilemma of what to do with those throwaway bottles."

After you've built your bird feeders, what should you feed backyard birds? In some cases, *not* the birdseed you commonly find at the grocery store. The Fish and Wildlife Service's report, "Relative Attractiveness of Different Foods at Wild Bird Feeders," will tell you what seed mixtures draw the most sought-after species where you live. For a copy, send a check or money order for \$2.75 to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (specify the report by title and by stock number 024-010-00587-4).

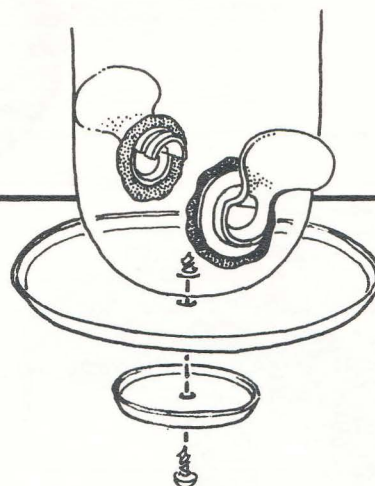
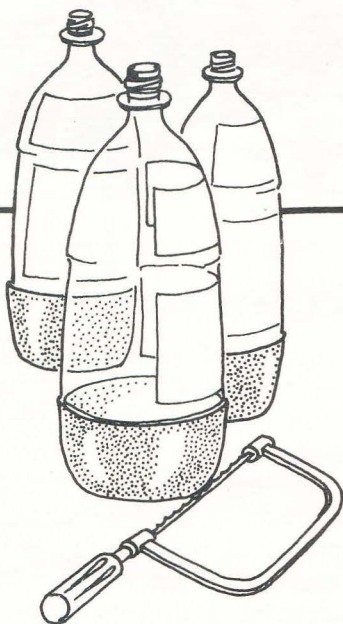
from U.S. Fish and Wildlife Service News

THISTLE SEED FEEDER

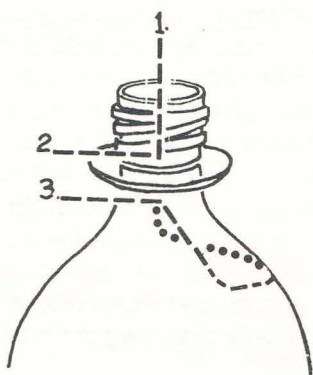


Steps 2, 3

SUNFLOWER SEED FEEDER



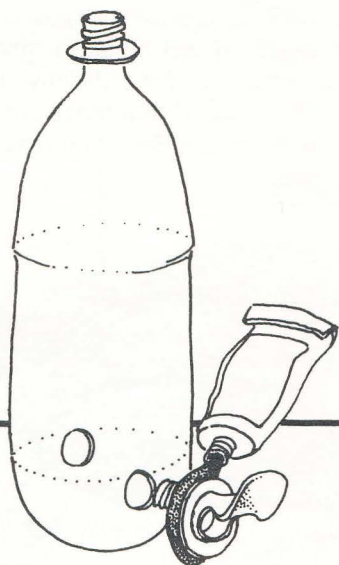
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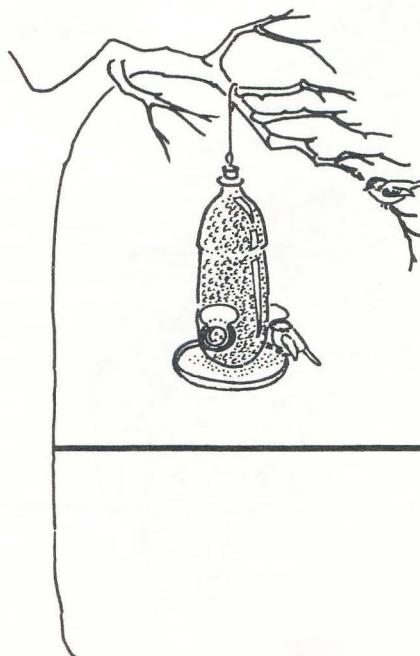
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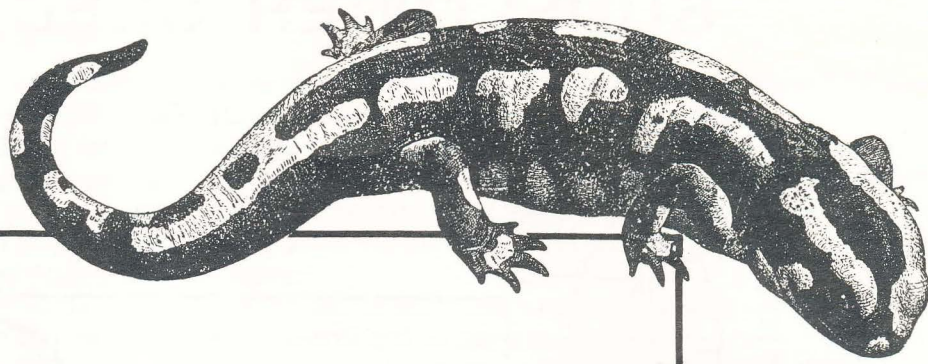


Step 5



Steps 2, 3





WANTED: ACCURATE INFORMATION

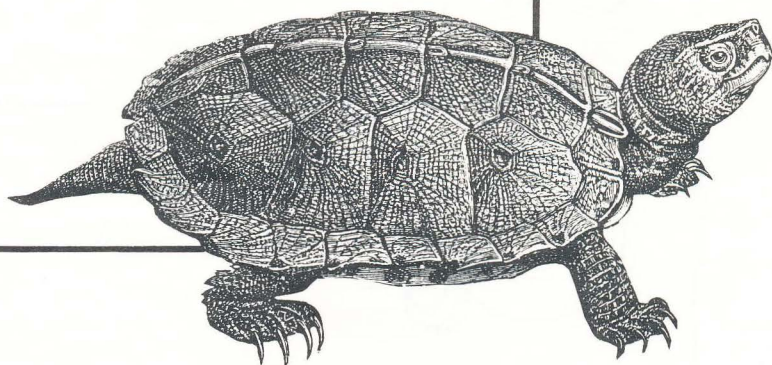
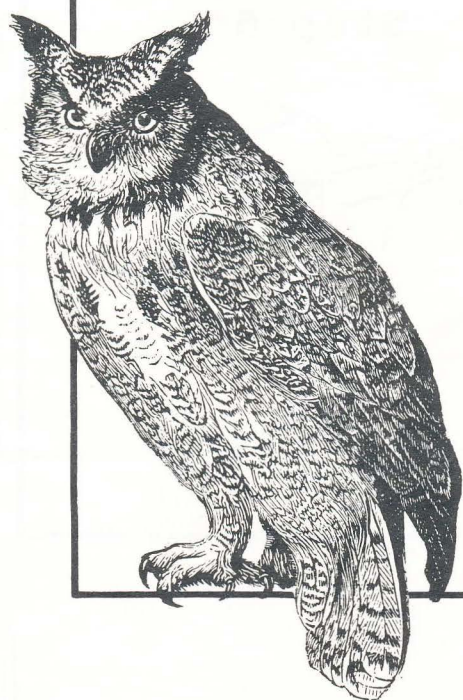
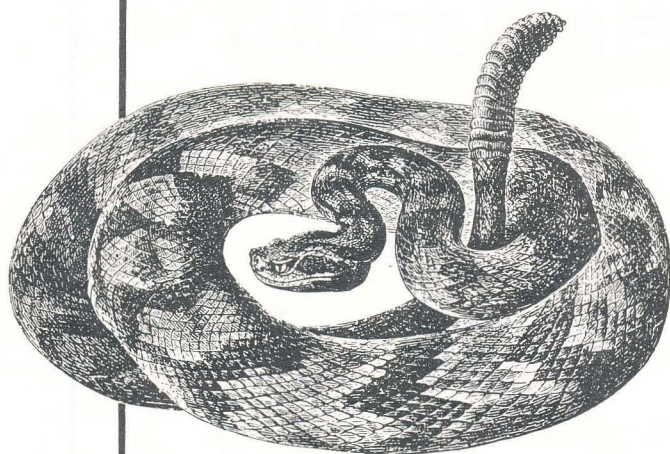
Your sighting reports of endangered and threatened species are needed to help in cataloguing the abundance of several key species. Precious little information is available especially on the sedge wren, pied-billed grebe, red-headed woodpecker and short-eared owl. Any information that you can provide on the breeding/wintering whereabouts of these birds is much appreciated! Sighting report forms are available through the Division's Trenton Office, the Regional Offices (Clinton, Assunpink and Williamstown) and through various conservation organizations.

The sedge wren (formerly the short-billed marsh wren) has not been documented as a breeding species for a number of years in New Jersey. Information is needed to ascertain whether or not the species should be removed from the state's list of endangered species, or if it does indeed occur in the state. The sedge wren inhabits the drier portions of brackish marshes and wet inland meadows.

The pied-billed grebe was added to the endangered species list this past year because the number of breeding locations of the species has shrunk to two. Kearny Marsh in Northern New Jersey and Pedricktown in Salem County appear to hold the only breeding pied-billed grebes in the state.

Red-headed woodpeckers are a threatened species in New Jersey. They prefer large open woodlots, and especially burned-over tracts of forest. Retaining snag species may help this species.

The short-eared owl was added to the state's list of endangered species this past year. A study to determine breeding sites of this crow-sized owl of open marshes was conducted this past summer by New Jersey Audubon's Pete Dunne. Investigations revealed that there are no short-eared owls breeding in the Delaware Bay. The rest of the state will be surveyed next year.



Endangered and Threatened Species Reporting Form

Species _____ Scientific name _____

Location where species was sighted _____

Township _____

County _____

Topographic quad (if known) _____ Land Ownership (if known) private _____ public _____

Date and time of sighting _____

Age (circle one) _____ immature _____ adult _____ unknown _____

Number of individuals sighted: _____

Behavior observed (eg. flying, perched, feeding, breeding activity): _____

Length of time observed: _____

How frequently has this species been observed at this location? _____

Habitat information if known (please check one):

Is this a wetland habitat? yes _____ no _____

Forest: Needleleaf _____ Broadleaf _____ Mixed _____

Plantation _____

Shrub: Needleleaf _____ Broadleaf _____ Mixed _____

Plantation _____

Herbaceous: Grasses and forbs _____ Mixed herbaceous _____

Agricultural: sod _____ small grains _____ unknown _____

field _____ orchard/nursery _____ hay _____

pasture _____ fallow (herbaceous) _____

Barren ground: mudflat _____ cliff _____ excavated _____ beach _____

Open water: saltwater _____ lake _____ river _____ estuarine _____

Developed: urban _____ suburban _____ rural _____

transportation _____ parks/rec. _____ cemeteries _____

Name of observer: _____

Address _____

Telephone _____

(Optional) Provide background on wildlife experience or knowledge: _____

Date sighting reported: _____

Were photographs taken? _____

Would you accompany a biologist to the site if needed? _____

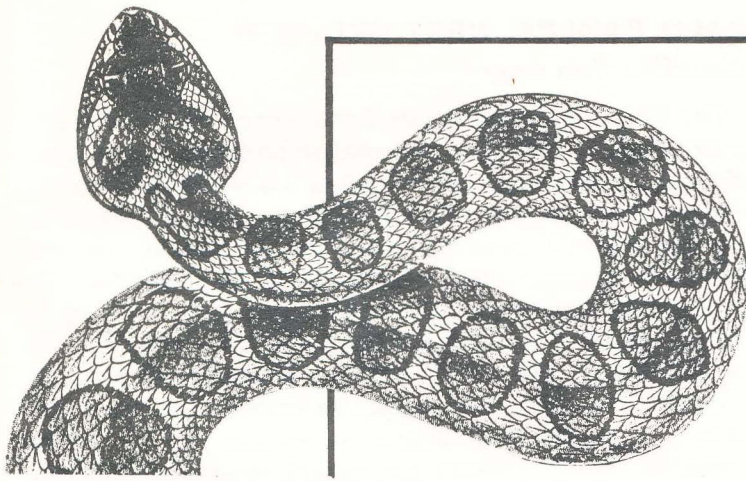


The Endangered and Nongame Species Project is currently reviewing the distribution and status of the following species. Your assistance in reporting sightings of any of these species would be appreciated.

Blue-spotted Salamander
Eastern Tiger Salamander
Long-tailed Salamander
Eastern Mud Salamander
Pine Barrens Treefrog
Southern Gray Treefrog
Bog Turtle
Timber Rattlesnake
Wood Turtle
Corn Snake
Northern Pine Snake
Bald Eagle
Peregrine Falcon
Osprey*
Cooper's Hawk
Least Tern*
Black Skimmer*
Pied-billed Grebe*
Great Blue Heron*
Red-shouldered Hawk*
Marsh Hawk*
Merlin
Upland Sandpiper*
Roseate Tern*
Barred Owl
Long-eared Owl
Short-eared Owl
Red-headed Woodpecker
Cliff Swallow*
Short-billed Marsh Wren
Bobolink*
Savannah Sparrow
Henslow's Sparrow
Vesper Sparrow
Ipswich Sparrow
Water Shrew
Smokey Shrew
Long-tailed Shrew
Least Shrew
Hairy-tailed Mole
Star-nosed Mole
Keen Myotis
Small-footed myotis
Silver haired bat
Eastern Pipistrel
Hoary Bat
Southern Flying Squirrel
Marsh Rice Rat
Deer Mouse
Eastern Wood Rat
Southern Bog Lemming
Meadow Jumping Mouse
Woodland Jumping Mouse

Please Draw Map Below

*Breeding Reports Only



TIMBER RATTLESNAKE TRACKING

Endangered and Nongame Species program biologists are playing hide and seek with the timber rattlesnake in South Jersey in order to learn more about its ecology and behavior.

Bob Zappalorti, director of Herpetological Associates (a New York based biological consulting firm), and his assistant Barry Kroger, a biology student, are involved in a research project to learn more about the secretive rattler in the New Jersey pinelands.

Bob Zappalorti, an experienced snake handler, captures the snakes using specialized equipment and then delivers them to Dr. Bryan Johnson of Cranberry Veterinary Clinic. Dr. Johnson has donated his time to anesthetize and surgically implant the snakes with tiny, battery-powered radio transmitters. The snakes are then taken back to the pine barrens where they're released at the capture site.

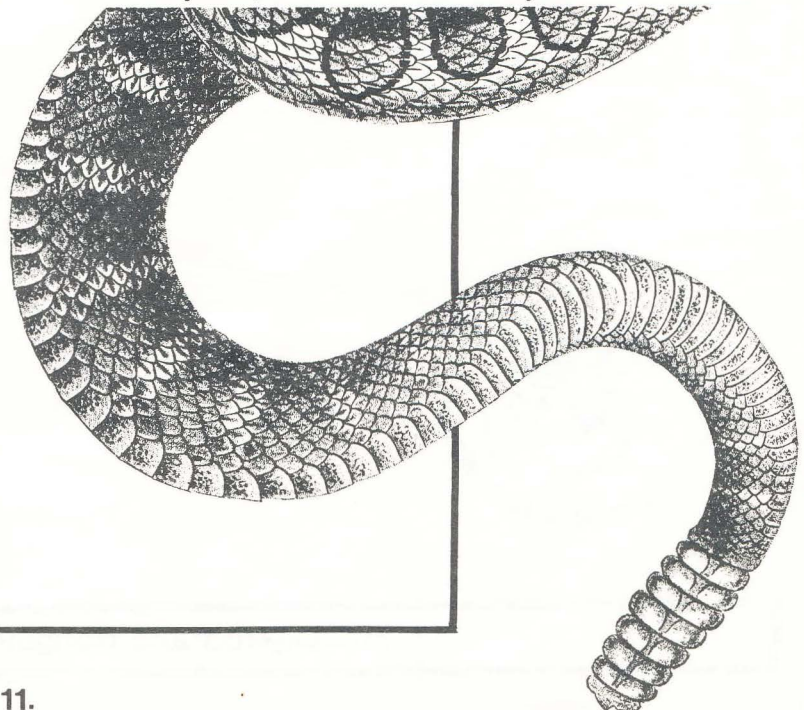
Equipped with portable receivers and antennas, the biologists now have high-tech on their side. Three or four times a week, Bob and Barry return to the study site to find the latest hiding place of each transmitter-equipped snake. Even with each snake now "beeping" their location to the biologists, their tendency to lie motionless in dense cover and their cryptic coloration make them difficult to find. At each relocation, the biologists take detailed data on temperature, vegetation, and snake behavior. The site is flagged so that they can return later and measure the distance the snake moved from the last relocation.

What is the purpose of this high-tech hide and seek? The timber rattler, resident of remote areas of the pinelands and the northern New Jersey mountains, is one of two snake species classified as endangered by the Division of Fish, Game & Wildlife. Due to loss of habitat, over-collecting, and persecution, rattlesnakes have become rare in New Jersey. Relatively little is known about the biology of this species, especially in its pineland habitats. By studying the "timbers'" movements, behavior, and habitat associations, scientists hope to discover some of its well-kept secrets. How far do the snakes roam? When do they begin to move to their hibernating areas? Where do they hibernate? What habitats in the pinelands do rattlers use most? Not only will answers to these questions help wildlife managers protect the snakes' habitat, but the more we know about rattlesnakes, the more we can protect snakes from people and people from snakes.

Some may question why we want to save this venomous snake. To begin with, the threat that the timber rattlesnake poses to human life is exaggerated. Very few people in rattlesnake country even see rattlesnakes, and fewer are bitten. Timber rattlers do not strike without provocation. The snakes would just as soon move quietly away. According to herpetologists, of all the species of rattlesnakes, the timber is considered to be the most docile. While they may coil and rattle when confronted, they must be goaded or scared into striking. Almost all bites occur when an uninformed individual or show-off attempts to pick up or tease the snake.

We should remember that rattlesnakes existed on this planet long before man. They play an important role in the ecosystem as efficient rodent predators. The rattlesnakes' syringe-like incisors and venom are designed for effective rodent predation, not for biting man. Rattlers have no teeth for chewing food. Their venom contains a digestive enzyme which, when injected into the mouse or rat, begins digestion before the prey even reaches the gut. Herpetologists note that the timber rattler, which takes 2-3 years to mature to reproductive age, breeds every 2 years or so, and has perhaps a dozen offspring, so it isn't likely to overrun any habitat. Moreover, a large percentage of the young probably fall prey to owls, hawks, raccoons, skunks, automobiles and the vagaries of bad weather.

Endangered Species Program biologists do have some advice for avoiding snake encounters of the unwanted kind. Brush piles, rock walls, and debris are a welcome sign for both rodents and rattlesnakes. Keep yards clear of inviting brush. Clear tall grasses, old piles of lumber and other hiding places. If you are out in rattlesnake territory during the months when snakes are most active (June-September), remember to look where you step. If you do see a rattlesnake, remember it can only strike a distance of one third its body length. Give the snake an opportunity to disappear by keeping your distance; chances are it'll be more than willing to oblige. Finally, unless you are familiar with snake identification and handling, do not attempt to pick up any snake!! Even some species of non-venomous snakes can inflict a nasty bite, one which can easily become infected.



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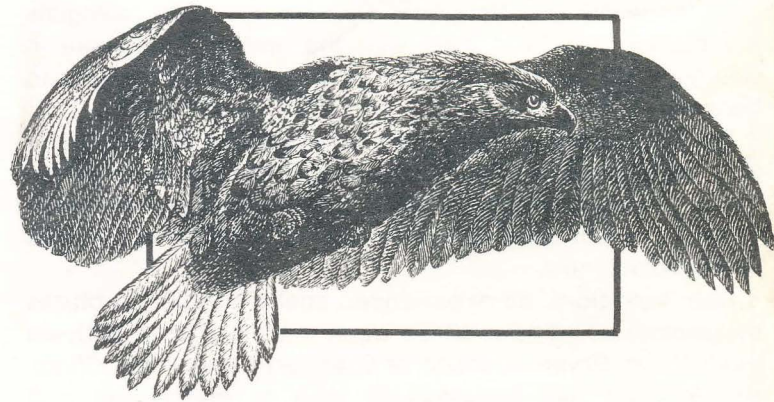
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BALD EAGLES' NEST SECURED

Continued from page 1

The New Jersey Endangered and Nongame Species Program provided biological information on the breeding habits of the bald eagle and also detailed the wildlife and habitat evaluation of the entire East Bear Swamp. In testifying during the court proceeding, State Deputy Attorney General Robert Grabowski cited studies done by Terrestrial Environmental Associates of Syracuse, New York showing the critical nature of the swamp's habitat and the need for placing the entire 1,500 acres under the protection of the state.

Under the ruling by Judge DeSimone, this tract representing a rare and unique ecosystem will be forever preserved for New Jersey eagles and an extensive array of other wildlife and plant species.

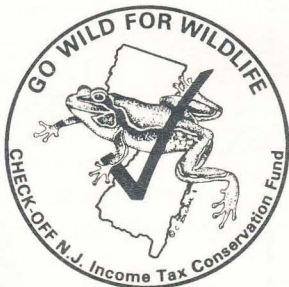


ENDANGERED AND NONGAME SPECIES PROGRAM

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